

CO53-003-e

### Interactions between brain-injured participants in a rehabilitation-based group meal preparation activity



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**Introduction.**— Group therapy is considered beneficial for language recovery in aphasia. Few studies have examined the changes that occur in such groups in terms of interactions. However, the study of interactions occurring in a group setting may be conducive to understanding the effects of therapy on language.

**Aims.**— Describe the interactions of an aphasic patient in a rehabilitation-based group meal preparation activity. This group activity involved 4 adults with brain injury and 2 therapists. The group meal preparation activity took place once a week for 7 weeks and was included in a broader rehabilitation program.

**Method.**— Each session was videotaped. We conducted qualitative and conversational analyses on the interactions initiated by an aphasic subject. We compared the data from three sessions: at the beginning (T1), middle (T2) and end (T3). Interactions initiated by the participant were identified to create units of analysis. Verbal and nonverbal communication of the interactants was explored with respect to communication type (transactional, personal, and non-directed), speech acts, turn-taking and relationship signals (gesture, proximity, and gaze).

**Results.**— Over the three sessions, interactions initiated by the aphasic participant were primarily transactional, were related to the ongoing activity and involved therapists. Over time, the participant initiated interaction more frequently and these involved longer turns. Speech acts evolved over time, from assertions or exclamations initially to more questions at the end. The participant initiated more interactions verbally over time.

**Discussion.**— The meal preparation group activity offered communication opportunities in a motivating, pleasurable context without emphasis placed on the use of language, thus promoting natural contextualized communication. This may be an optimal situation for understanding of the impact of aphasia therapy.

**Conclusion.**— Preliminary results indicate that the participant improved her communication skills. These results support the idea of benefits associated with contextualized group therapy focused on activity.

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### Survey knowledge of stroke and speech therapy rehabilitation



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**Keywords:** Stroke; Rehabilitation; Speech therapy; National survey

**Introduction.**— Stroke program, implemented in 2010 through 2014, raises issues of stroke but when exactly is knowledge of the French population about stroke and its sequelae?

**Patients and methods.**— After writing a questionnaire targeting the warning signs, the mechanisms involved in stroke, risk factors and consequences such as aphasia and its management, we submitted 300 unselected people based on gender, age, education and place of living within the national population.

**Results.**— Two hundred and eighty questionnaires were used for this study. Approximations and confusion remain about stroke in the minds of the people from all the sources of information remain unclear and intervention in speech therapy support post-stroke is still unknown.

Sudden difficulty in speaking ( $P = 0.04$ ), decreased vision ( $P = 0.04$ ) and facial palsy ( $P = 0.03$ ) significantly appear at the top of the warning signs and, depending on the variable “age”. However, the weakness of half the body, headache and knowledge of the emergency call number (15) are not known regardless of age, gender and level of life. In addition, speech therapy stroke appears too little given the prescribed number of strokes and speech therapy monitoring of stroke patients not optimal.

**Conclusion.**— This study highlights the misunderstandings of the French in stroke and imperfections of speech therapy. It must be part of a broader media and more effective stroke and its consequences in society.

**Further reading**

Dere L., Adeleine P., & al, (2002) Factors influencing early admission in a French stroke unit. *Stroke*;33(1):153-9.

Hodgson C. (2007) To Fast or Not to Fast? *Stroke*; 38(10):2631-2.

Kleindorfer Do., Miller R. & al, (2007) Designing a message for public education regarding stroke: Does FAST capture enough stroke? *Stroke*;38: 2864-8.

Le Breton F., Davenne B. (2010), Accident vasculaire cérébral et Médecine physique et de réadaptation: actualités en 2010, éd Springer.

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### Facilitate communication to facilitate social participation: Example of a dyade with one member has aphasia



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**Keywords:** Aphasia; Communication; Conversational intervention; Quantitative measures

**Aim.**— Aphasia causes difficulties in social participation. Relatives of people with aphasia mention that to know how to communicate with their partner is one of their most important needs [1]. There is a growing interest in aphasiology concerning interventions focused on communication between the person with aphasia and his/her main conversation partner. Studies that aim to verify the efficacy of conversational intervention report interesting results, but they are often descriptive or qualitative. The aim of the present study is to verify quantitatively the efficacy of a conversational intervention.

**Material and method.**— An AB-A design was used. Four baseline measures, measures at each intervention session, three measures post-treatment and three measures three months post-intervention will be performed. Conversations (recorded on videos) about plans for the next week-end were analysed. Also, two videos per intervention where the couple had to discuss and propose a common solution to a problem have been analysed with a professional program called Studio-code 10.5. The dyad is composed of a 61 years old man with a mixed moderate to severe aphasia and his 59 years old brother.

The intervention is inspired by Supporting Partners of People with Aphasia in Relationships & Conversation [2]. The specific aims for the dyad is to improve the efficacy of writing to communicate.

**Results.**— Results for the pre-therapy sessions are available. They indicate that there is a poor use of writing. Writing is efficient 7/14 times so at 50% and the person with aphasia often initiates writing without making it helpful for his partner.

**Discussion.**— Other quantitative and qualitative analyses will be performed in order to measure the efficacy of intervention. Analyses with Studiocode are interesting for conversation.

**References**

[1] Johansson M, Carlsson M, Östberg P, Sonnander K. Communication changes and SLP services according to significant others of persons with aphasia. *Aphasiology* 2012;26(8):1005–28.

[2] Lock S, Wilkinson R, Bryan K, Maxim J, Edmundson A, Bruce C, et al. Supporting partners of people with aphasia in relationships and conversation (SPPARC). *Int J Lang Com Disord* 2001;36(suppl.):25–30.

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## Subtle language in patients with traumatic brain injury

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**Keywords:** Subtle language; Traumatic brain injury; Dysexecutive syndrome  
**Objectives.** Subtle language is the expression of semantic and lexical knowledge and linguistic expertise. It comprises of elements of metalanguage and pragmatics. Patients with traumatic brain injury (TBI) classically show preservation of elementary lexical and syntactic abilities. But they are impaired in their ability to communicate, and this could partially result from subtle language difficulties. Our aim was to evaluate this language.

**Subjects and methods.** We included 44 patients having suffered a TBI, most often severe (GCS < 8). The mean time post-TBI was 8.1 month. The subtle language was analyzed by 15 tests: definitions, evocation of names from definitions, sentences construction, synonyms, antonyms, polysemy, intruders, differences, figurative expression, proverbs, verbal logic, absurd sentences, procedural discourse, declarative discourse and argumentative discourse. There were three levels of increasing difficulty in each subtest. Patient performance was compared to that of an equivalent (age, education level) group of normal control subjects.

**Results.** Multivariate analysis showed a significant ( $P < 0.05$ ) overall deficit of patients, with preferential impairment of synonyms, antonyms, differences, proverbs, figurative expressions and verbal logic. But definitions and discourses were relatively preserved. There was an effect of the difficulty level, because more severe disorders were found in difficult items. These disorders correlated with the severity of language deficits in conventional aphasia tests (verbal fluency, naming) and the dysexecutive syndrome, but not with episodic memory disorders.

**Conclusions.** TBI patients can present with subtle language difficulties, when basic language capacities are relatively preserved. These disorders could be promoted by the dysexecutive syndrome. They require specific assessment and adapted care.

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## Communications affichées

### Version française

P135-f

## Expérience et développement d'un programme transdisciplinaire orthophoniste-kinésithérapeute en groupe de patients parkinsoniens

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**Mots clés :** Maladie de Parkinson ; Dysarthrie ; Hypophonie ; Rééducation transdisciplinaire en groupe

**Contexte.** La dysarthrie et notamment l'hypophonie dans la maladie de Parkinson sont invalidantes, majorant l'isolement social, et justifient un suivi

orthophonique qui peut s'avérer insuffisant en raison de l'association de causes : insuffisance d'intensité de la voix, difficultés posturale et respiratoire.

**Objectifs.** Élaborer un programme rééducatif pluridisciplinaire de groupe associant orthophonie et kinésithérapie.

**Matériel et méthode.** Les patients sont inclus pour dysarthrie, suite à une consultation neurologique et un bilan orthophonique.

Quatre patients de 69 à 72 ans ont été admis pour la constitution du premier groupe, avec des degrés divers d'atteintes motrice et dysarthrique.

Le programme, basé sur l'intensité vocale et la posture, comprend 8 séances (1h30 par semaine, sur huit semaines). Chaque séance se compose de 4 temps (prise de conscience, travail respiratoire et postural, voix, intelligibilité), séquences bien dissociées en début de stage qui se fondent progressivement au cours des acquisitions.

L'évaluation est faite sur des vidéos en début et fin de rééducation et sur un auto-questionnaire de satisfaction.

**Résultats.** Un patient a abandonné pour des contraintes d'horaire. Pour les 3 patients, l'intensité vocale est nettement améliorée ; la mimo-gestuelle, plus présente, ajoute du sens aux phrases exprimées, plus longues et plus audibles. Le contenu des séances a été unanimement apprécié. La dynamique de groupe a apporté entraide et valorisation.

**Discussion.** Les bénéfices majeurs portent sur l'intensité et l'expressivité de la voix, la modulation du souffle et la confiance regagnée dans la communication. Seul le travail d'entraînement à la maison a été nuancé car jugé trop contraignant. Le projet est de poursuivre ce type de prise en charge avec :

- la mise en place de situations écologiques (jeux de rôles...);
- une meilleure implication de l'entourage et des professionnels libéraux ;
- l'association à une activité physique adaptée.

**Pour en savoir plus**

La rééducation orthophonique de la dysarthrie et des troubles de déglutition dans la maladie de Parkinson ; M Ruiz et col ; *Revue de neuropsychologie* 2012, 4(suppl 1), 12-7.

Physical therapy in Parkinson's disease : evolution and future challenges ; SHJ keus et al ; *Movement disorders*, vol 24, 1-14, 2009.

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## Dysphonie et dysprosodie après AVC : rééducation en cothérapie psychomotricité et orthophonie

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**Mots clés :** Psychomotricité ; Orthophonie ; Co-thérapie ; AVC ; Dysphonie ; Dysprosodie

**Introduction.** Nous rapportons l'observation d'un patient de 56 ans, écrivain, victime d'un AVC sylvien droit secondaire à une dissection de l'artère carotide interne droite. Aucun facteur déclenchant n'est retrouvé. Il présentait une hémiparésie gauche sévère et un syndrome de l'hémisphère droit avec notamment une importante dysphonie et dysprosodie. Des troubles de la posture et de la coordination pneumophonique majorant la dysphonie ont rapidement été constatés ainsi qu'une absence d'engagement du corps dans la communication verbale et non verbale freinant la rééducation de la dysprosodie.

**Observations.** La décision a été prise de débiter un travail commun d'orthophonie et de psychomotricité. Ce travail interprofessionnel a mis en lien des techniques spécifiques aux champs de la psychomotricité et de l'orthophonie. Chaque séance encadrée conjointement par les deux thérapeutes s'est déroulée en 2 temps : un rituel de début comportant les exercices de posture, respiration, phonation et modulation de la voix, puis un travail autour de la médiation théâtrale passant par le rythme et la communication verbale (voix, prosodie) et non verbale (gestuelle). L'expression théâtrale permet de travailler tant les différents paramètres vocaux (intensité, fréquence) et la dysprosodie que les troubles cognitivo-comportementaux (syndrome dysexécutif, négligence spatiale